

Finding of No Significant Impact

Arrow Pipeline, L.L.C.

*Addendum to Environmental Assessment to Authorize Land Use for Pipelines
Connecting the Fort Berthold #148-94-33D-28-4H, -5H Wells to the Approved Arrow
Fort Berthold #147-94-3A-10-1H Pipeline System*

*Fort Berthold Indian Reservation
Dunn County, North Dakota*

The U.S. Bureau of Indian Affairs (BIA) has received a proposal for an addendum for the construction and installation of three pipelines including one oil pipeline, one gas pipeline, and one produced water pipeline. As proposed, the Fort Berthold #148-94-33D-28-4H, -5H pipeline system (pipelines) would transport oil, NGL, and produced water to markets and approved disposal sites. The pipelines would be located on trust land, entirely within Dunn County on the Fort Berthold Reservation in North Dakota. Associated federal actions by BIA include determinations of impacts and effects regarding environmental resources for developments on tribal lands.

The potential of the proposed actions to impact the human environment is analyzed in the attached addendum to an existing EA, as required by the National Environmental Policy Act. Based on the recently completed addendum to the EA, I have determined that the proposed project will not significantly affect the quality of the human environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

1. Agency and public involvement solicited for the preceding NEPA document was sufficient to ascertain potential environmental concerns associated with the currently proposed project.
2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed actions and the No Action alternative.
3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species. This guidance includes the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", and the Endangered Species Act (16 U.S.C. 1531 et seq.).
4. The proposed actions are designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.
5. Environmental justice was fully considered.
6. Cumulative effects to the environment are either mitigated or minimal.
7. No regulatory requirements have been waived or require compensatory mitigation measures.
8. The proposed projects will improve the socio-economic condition of the affected Indian community.



Regional Director

3-27-2012

Date

ACTING

ENVIRONMENTAL ASSESSMENT Addendum

United States Bureau of Indian Affairs

**Great Plains Regional Office
Aberdeen, South Dakota**



Arrow Pipeline, LLC

**Addendum to Environmental Assessment to Authorize Land Use for Pipelines
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Fort Berthold #147-94-3A-10-1H Pipeline System**

Fort Berthold Indian Reservation

March 2012

For information contact:
Bureau of Indian Affairs, Great Plains Regional Office
Division of Environment, Safety and Cultural Resources Management
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(605) 226-7656

TABLE OF CONTENTS

	<u>Page</u>
1. Purpose and Need for the Proposed Action	1
2. Authorities.....	1
3. Legal Land Description for Proposed Action	1
4. Scope of Work for Proposed Action	1
5. Materials Information and Corrosion Rates	2
6. Spill Response Plan.....	2
7. Pipeline Marking Procedures	2
8. Quality Control/Quality Assurance Measures	3
9. Valve Locations	3
10. Reclamation.....	3
11. Surveys.....	4
12. Potential Effects	5
13. Applicable NEPA Document(s).....	5
14. Other Relevant NEPA Document(s)	6
15. NEPA Adequacy Criteria.....	6

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 Proposed Fort Berthold #148-94-33D-28-4H, -5H Pipeline System.	7

LIST OF APPENDICES

<u>Appendix</u>
A Pipeline Layout and Pipeline Right-of-Way for Fort Berthold #148-94-33D-28-4H, -5H Pipeline System

1. Purpose and Need for the Proposed Action

The purpose of the proposed action is to authorize the land use by Arrow Pipeline, LLC (Arrow) for the construction and installation of three pipelines including one oil pipeline, one natural gas liquids (NGL) pipeline, and one produced water pipeline. As proposed, the Fort Berthold #148-94-33D-28-4H, -5H pipeline system (pipelines) would transport oil, NGL, and produced water to markets and approved disposal sites. A buried electrical line may be installed within the approved right-of-way (ROW) in the future.

Developments have been proposed on land held in trust by the United States in Dunn County, North Dakota, where the Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected individual allotments. The economic development of available resources and associated BIA actions are consistent with BIA's general mission. Leasing and development of mineral resources offers substantial economic benefits to the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nations and to individual tribal members.

2. Authorities

Oil and gas exploration and development activities are conducted under authority of the Indian Mineral Leasing Act of 1938 (25 United States Code [USC] 396a, et seq.), the Indian Mineral Development Act of 1982 (25 USC 2101, et seq.), and the Energy Policy Act of 2005 (42 USC 15801, et seq.).

3. Legal Land Description for Proposed Action

The pipelines would be located on trust land, entirely within Dunn County, North Dakota, originating near the southeast corner of the proposed Fort Berthold #148-94-33D-28-4H, -5H well pad, in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 33, Township (T) 148 North (N), Range (R) 94 West (W). The pipelines would trend east and southeast through the SW $\frac{1}{4}$ of Section 34, T148N, R94W, then trend southeast through the NW $\frac{1}{4}$ then northeast through the NE $\frac{1}{4}$ of Section 3, T147N, R94W, until terminating at the approved Arrow Fort Berthold #147-94-3A-10-1H pipeline system (tie-in).

4. Scope of Work for Proposed Action

Oil, NGL, and produced water pipelines would be buried in either two 2.5-foot-wide trenches, spaced 5.0 feet apart, or one 5.0-foot-wide trench. Oil and NGL pipelines would be no greater than 8 inches in diameter and constructed of new steel. The produced water pipeline would also be no greater than 8 inches in diameter and constructed of Fiberspar[®] or similar corrosion-resistant material. All of the construction disturbances would occur within a 120-foot-wide temporary construction ROW and permanent surface disturbance would occur within a 50-foot-wide ROW between the well pad and the tie-in.

Approximately 5,672 feet of oil, NGL, and produced water pipe would be needed to connect the Fort Berthold #148-94-33D-28-4H, -5H wells to the tie-in. Approximately 15.62 acres

would be disturbed as a result of activities associated with the construction of the proposed pipelines. Pipeline plats are provided in Appendix A.

5. Materials Information and Corrosion Rates

Steel Pipe

Arrow proposes to construct the oil and NGL pipelines using new steel pipe rated by the American Petroleum Institute (API) as 5L X52. Arrow would ensure that each steel pipe segment is coated with approximately 14 to 16 millimeters of fusion bonded epoxy coating. Further, Arrow would deploy an active cathodic protection system for all steel pipe, which further reduces the likelihood of external corrosion. Arrow would ensure that each steel pipe segment is allotted a 1/16-inch corrosion allowance; however, because of the non-corrosive nature of Bakken crude and the low concentrations of hydrogen sulfide, Arrow does not anticipate any external or internal corrosion during the operating lifetime of the pipe, which, at a minimum, is estimated to be 50 years.

Fiberspar[®] or Similar Pipe

Arrow proposes to construct the produced water pipeline using a material known as Fiberspar or one with the same corrosion-resistant characteristics as Fiberspar. This type of material is not subject to internal or external corrosion.

6. Spill Response Plan

Arrow has developed a Spill Response Plan (Plan) (Middick 2011¹) for the Phase 3 Southwest pipeline. The spill preventative measures and monitoring protocols, notification procedures, spill detection and on-scene spill mitigation procedures, response activities, contacts, training and drill procedures, and response plan review and update procedures, as referenced in the Plan, apply to the proposed pipelines. A copy of the Plan has been filed with the BIA and Arrow has legally committed to adhering to the procedures and requirements as defined by federal law (Title 49 Code of Federal Regulations [CFR] 194). Arrow has committed to submitting a spill response plan, specific to this proposed project, to the BIA prior to the commencement of construction activities.

7. Pipeline Marking Procedures

Arrow adheres to the requirements of 49 CFR 192.707 with regard to the marking of buried pipelines. Specifically, Arrow would place pipeline markers within 1,000 feet of one another at all public road crossings, railroad crossings, creek crossings, fence crossings, and at all points of major direction change.

¹ Middick, Andy. 2011. *Operations Monitoring and Spill Response Plan*. Blackshare Environmental Solutions. Oklahoma City, Oklahoma.

8. Quality Control/Quality Assurance Measures

Arrow purchases steel pipe that is rated as API 5L X52 and inspects all pipe while at the mill to ensure quality. Arrow is also present to ensure that external epoxy coating is applied to a minimum thickness of 14 millimeters. During construction, all welds are visually inspected for quality and completeness by qualified professionals. Once welds have passed visual inspection, they are subjected to 100 percent Non-Destructive Testing. After passing these tests, the weld areas are covered for corrosion protection. After the weld areas have been covered, the external coating of the pipe is inspected using a jeepmeter to detect holes and cracks. The pipe is lowered into the trench and buried. Prior to being put into service, the steel pipe is hydrotested to approximately 1.5 times the minimum design pressure of 1,180 pounds per square inch gauge (psig). The produced water pipe is designed to sustain a minimum pressure of 750 psig and is hydrotested to approximately 900 psig prior to being approved for service.

9. Valve Locations

Two valves would be installed at each end of the proposed pipelines. One valve would be installed at the well location while the second valve would be installed at the proposed tie-in. The installation of two valves would allow Arrow to isolate the proposed pipelines, if required.

10. Reclamation

Interim Reclamation

Reclamation would continue to occur over the life of the pipelines. Initial reclamation would be required after initial construction and then following any maintenance work or additions of infrastructure. Reclamation would be required before final abandonment of the decommissioned pipelines. Successful reclamation would at all times be the responsibility of the system's operator.

Trenches would be back-filled immediately after the pipe is installed and testing is complete, assuming frozen or saturated soils are not present. Back-fill piles would be stored opposite of the topsoil piles during construction. If construction occurs during winter, Arrow would partially fill the trench with useable, non-frozen, back-fill soil to the extent possible and cover the entire ROW including the trench with straw. The trench would be back-filled and topsoil distributed as soon as practicable after the soil has defrosted. Topsoil piles would be covered to eliminate the potential for rill erosion and subsequent loss of soil during spring snow melt and precipitation events.

Applicable short- and long-term best management practices would be used to minimize and control erosion in disturbed areas. To reduce compaction, the ROW would be plowed before the stockpiled topsoil is distributed.

The disturbed areas would be reclaimed and contoured as soon as possible after construction is complete (fall/spring). The ROW would be covered with stockpiled topsoil and seeded with a seed mixture determined by the BIA. Arrow would control noxious weeds within the ROW and other applicable facilities by approved chemical or mechanical methods. If seeding of the ROW does not occur due to growing season constraints, Arrow would deploy approved weed-free hay across the entire ROW. The presence of hay across the ROW would reduce the potential for excessive erosion as a result of spring snow melt and precipitation.

The entire ROW would be monitored for erosion, subsidence, and noxious weeds. In areas where problems are found to occur, reclamation efforts would continue until the BIA feels the ROW is successfully reclaimed. Reclamation is considered successful when:

- seeded areas are established;
- adjacent vegetative communities spread back into the disturbed areas; and
- noxious weeds are under control.

If after two growing seasons the new seeding is not successful, the BIA may require additional efforts to establish vegetation. For noxious weeds, a survey was conducted on the ROW prior to the construction commencing. The BIA has developed a weed management plan to treat known or likely to occur noxious weed species.

Final Reclamation

Final reclamation would occur when the pipelines are decommissioned. All disturbed areas would be reclaimed, reflecting the BIA's view of oil and gas exploration and production as temporary intrusions on the landscape. All facilities would be removed. It is economically and environmentally unfeasible to excavate and remove the decommissioned pipelines. Instead, the pipelines would be purged with water of any natural gas remaining in the lines and abandoned in place.

11. Surveys

SWCA Environmental Consultants (SWCA) conducted natural resource surveys for threatened and endangered species and habitat, migratory birds and active nests, bald and golden eagles and nests, and wetlands/waterbodies on July 13, 2011. Those present during the on-site agreed the selected location would minimize potential impacts to sensitive resources.

No threatened and endangered species or bald/golden eagles or nests were observed during the natural resource survey. Migratory bird habitat is prevalent in the survey area and Arrow has committed to following one of three listed mitigation procedures in order to reduce the potential for impact on migratory birds and their nests: 1) conduct construction outside of the migratory bird breeding season (February 1–July 15); 2) regularly mow vegetation in the ROW prior to February 1 and maintain through July 15; or 3) conduct a field survey for nesting migratory birds within five days of construction commencement. SWCA identified three palustrine emergent wetlands within the survey corridor during the field survey (Figure

1). Arrow has committed to avoiding disturbance to the drainage that contains NRA_WET1 and NRA_WET2 (see Figure 1). The BIA deemed that no mitigation is necessary for NRA_WET3, due to the minimal extent of temporary impact.

A cultural resource inventory of this pipeline route was conducted by personnel of SWCA Environmental Consultants, using an intensive pedestrian methodology. Approximately 26.65 acres were inventoried on July 13, 2011 (Schleicher 2012). No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of **no historic properties affected** for this undertaking. This determination was communicated to the THPO on February 21, 2012; however the THPO did not respond within the allotted 30 day comment period.

Schleicher, Jolene

(2012) A Class I and Class III Cultural Resource Inventory of the Arrow Fort Berthold #148-94-33D-28-4H, 5H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.

12. Potential Effects

Potential direct impacts to cultural resource sites would occur as a result of disturbance and/or the loss of sites eligible for the National Register of Historic Places. However, no cultural resources were identified during the field survey, therefore no impact is anticipated.

Potential direct impacts to natural resources may include the loss of native vegetation and wildlife habitat, soil disturbance, and erosion during construction that may adversely affect air and water quality. Impacts would be mitigated by using best management practices during construction to minimize disturbance. Once construction activities are completed, reclamation would take place within 6 months and would include the return of topsoil and contouring, and seeding of native vegetation.

Potential indirect impacts include noise and other disturbances to wildlife during construction and the introduction of noxious weeds. Impacts would be mitigated through avoidance of any federally listed threatened or endangered species or wetlands, avoidance of nesting migratory birds, implementing best management practices to control the introduction of noxious weeds, and minimizing the length of time between trenching, pipeline burial, and reclamation. These mitigation measures are consistent with the approved National Environmental Policy Act (NEPA) document, which received a finding of no significant impact (FONSI) (September 2011).

13. Applicable NEPA Document(s)

Environmental Assessment and Finding of No Significant Impact: Arrow Pipeline, LLC Phase 3 Southwest Pipeline (September 2011).

14. Other Relevant NEPA Document(s)

Addendum to Environmental Assessment and Finding of No Significant Impact: Arrow Pipeline, LLC Fort Berthold #147-94-1A-12-1H, #147-94-3A-10-1H, #148-94-9D-04-1H, -2H, #148-94-17D-08-1H, -2H, #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H Well Pads to the Arrow Phase 3 Southwest Prime Pipeline Arrow Pipeline, LLC (October 2011).

15. NEPA Adequacy Criteria

This document has identified a previously prepared NEPA document, *Environmental Assessment and Finding of No Significant Impact: Arrow Pipeline, LLC Phase 3 Southwest Pipeline* (September 2011), which adequately describes the environmental consequences of the newly proposed action described herein, and meets the following NEPA Adequacy Criteria.

1. The proposed action is substantially the same action and at the site specifically analyzed in the existing NEPA document.
2. The range of alternatives is reasonable with respect to the current proposed action in the existing NEPA document, which appropriately considers and analyzes current environmental concerns, interests, and resource values.
3. The existing analysis and conclusions are adequate in the existing NEPA document. The analysis is still valid in light of new studies or resource assessment information.
4. The methodology and analytical approach used in the existing NEPA document continues to be appropriate for the proposed action.
5. The direct and indirect impacts of the proposed action are unchanged from those identified in the existing NEPA document.
6. The cumulative impacts that would result from implementation of the proposed action are unchanged from those analyzed in the existing NEPA document.
7. A 30-day comment period involving public input and interagency review was used in the development of the existing NEPA document.

Addendum to Environmental Assessment to Authorize Land Use for Pipelines Connecting the Fort Berthold #148-94-33D-28-4H, -5H Wells to the Approved Arrow Fort Berthold #147-94-3A-10-1H Pipeline System
(March 2012)

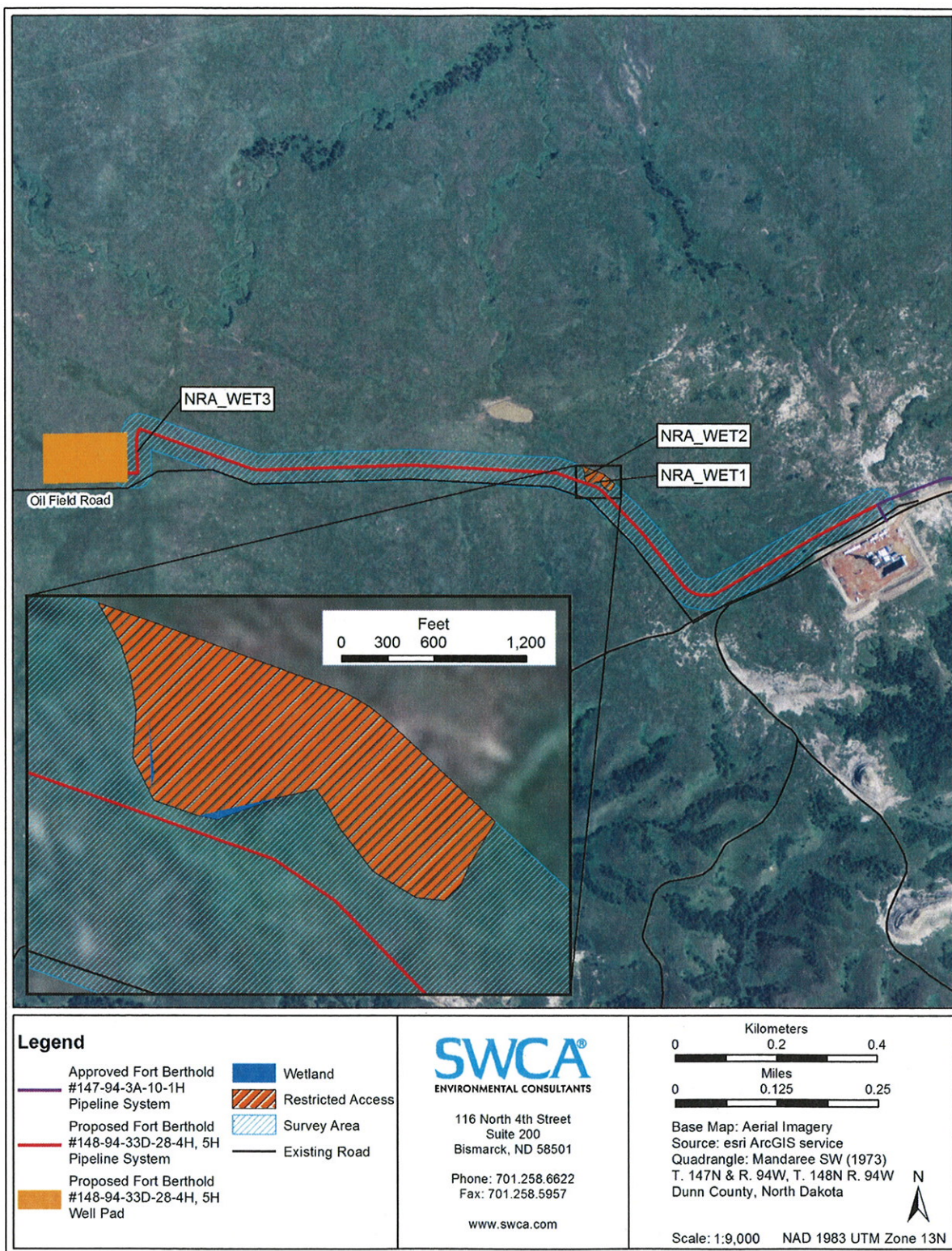


Figure 1. Proposed Fort Berthold #148-94-33D-28-4H, -5H Pipeline System.

*Addendum to Environmental Assessment to Authorize Land Use for Pipelines Connecting the Fort
Berthold #148-94-33D-28-4H, -5H Wells to the Approved Arrow Fort Berthold #147-94-3A-10-1H
Pipeline System
(March 2012)*



IN REPLY REFER TO:
DESCRM
MC-208

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401



FEB 21 2012

Elgin Crows Breast, THPO
Mandan, Hidatsa and Arikara Nation
404 Frontage Road
New Town, North Dakota 58763

Dear Mr. Crows Breast:

We have considered the potential effects on cultural resources of an oil gathering line in Dunn County, North Dakota. Approximately 26.65 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the area depicted in the enclosed report. No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. No properties were located that appear to qualify for protection under the American Indian Religious Freedom Act (42 USC 1996).

As the surface management agency, and as provided for in 36 CFR 800.5, we have reached a determination of **no historic properties affected** for this undertaking. Catalogued as **BIA Case Number AAO-2056/FB/12**, the proposed undertaking, location, and project dimensions are described in the following report:

Schleicher, Jolene
(2012) A Class I and Class III Cultural Resource Inventory of the Arrow Fort Berthold #148-94-33D-28-4H, 5H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota.
SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.

If your office concurs with this determination, consultation will be completed under the National Historic Preservation Act and its implementing regulations. We will adhere to the Standard Conditions of Compliance.

If you have any questions, please contact Dr. Carson N. Murdy, Regional Archaeologist, at (605) 226-7656.

Sincerely,

Regional Director

Enclosure

cc: Chairman, Three Affiliated Tribes
Superintendent, Fort Berthold Agency

APPENDIX A

Pipeline Layout and Pipeline Right-of-Way for Fort Berthold #148-94-33D-28-4H, -5H Pipeline System

OWNER:	1069A SE 1/4 SE 1/4 SEC. 33, T148N, R94W, 5th P.M.	11+23.73	124.61	7.29	31+79.76 935A-A NW 1/4 SEC. 3, T147N, R94W, 5th P.M.
RODAGE	0+00	68.10			
STATIONING	0+00	2472.94 P.L. 91610'R 3413.15 P.L. 120229'R 3453.08 P.L. 900002'R	11+23.73 P.O.S.L. 11+31.40 P.L. 927061' 11+73.38 P.L. 1152271'	21+70.13 P.L. 439277'R 29+82.37 P.L. 120003'R 30+27.39 P.L. 42406'R	31+79.76 P.O.S.L.
PLAN					
CLASS	A				
TERRAIN	PASTURE				
PROFILE					
HORIZ: 1"=300'					
VERT: 1"=100'					
EASEMENT WORKSPACE	PERM. EASEMENT TEMP. EASEMENT ADOT TEMP. WORKSPACE				
U.S. UTAH ENGINEERING & LAND SURVEYING 806 SOUTH 200 WEST, P.O. BOX 84076 SALT LAKE CITY, UTAH 84108					
ARROW PIPELINE, LLC FORT BERTHOLD #148-94-SSD-28-4H & #148-94-SSD-48-5H PIPELINE PLAN & PROFILE					
LOCATED IN SECTIONS 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 6					

P.O.S.L. 11+23.73 BEARS N00°01'23"E 139.45' FROM THE SOUTHEAST CORNER OF SECTION 33, T148N, R94W, 5th P.M.

P.O.S.L. 31+79.76 BEARS N89°50'50"W 602.45' FROM THE SOUTH 1/4-1/4 CORNER OF SECTION 34, T148N, R94W, 5th P.M.

P.O.P.L. 39+80.94 BEARS S00°02'30"E 499.41' FROM THE NORTH 1/4-1/4 CORNER OF SECTION 3, T147N, R94W, 5th P.M.

END OF PIPELINE STA. 56+71.91 BEARS S79°48'45"W 1224.39' FROM THE NORTHEAST CORNER OF SECTION 3, T147N, R94W, 5th P.M.

<i>RIGHT-OF-WAY LENGTHS</i>			
PROPERTY OWNER	FEET	ACRES	RODS
1069A	1123.73	1.290	68.10
T982A	2056.03	2.360	124.61
935A-A	801.18	0.920	48.56
T1698	1690.97	1.941	102.48
TOTAL	5671.91	6.510	343.75

HORIZONTAL DIST. = 5672'
SLOPE DISTANCE = 5676'

Sec. 34

SE 1/4

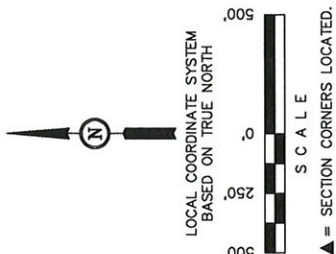
SECTIONS 33 & 34, T148N, R94W, &
SECTION 3, T147N, R94W, 5th P.M.,
DUNN COUNTY, NORTH DAKOTA

ARROW PIPELINE, LLC

**PIPELINE RIGHT-OF-WAY
ON TRIBAL LANDS**
*(For FORT BERTHOLD
#148-94-33D-28-4H &
#148-94-33D-28-5H)*

LOCATED IN

SECTIONS 33 & 34, T148N, R94W, &
SECTION 3, T147N, R94W, 5th P.M.,
DUNN COUNTY, NORTH DAKOTA



PIPELINE RIGHT-OF-WAY DESCRIPTION

A 50' WIDE RIGHT-OF-WAY 25' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE SE 1/4 SE 1/4 OF SECTION 33, T148N, R94W, 5TH P.M., WHICH BEARS N80°37'33"W 812.16' FROM THE SOUTHEAST CORNER OF SAID SECTION 33, THENCE S89°58'53"E 62.44'; THENCE N00°00'36"E 210.50'; THENCE N08°16'46"E 40.21'; THENCE N21°19'15"E 39.93'; THENCE S68°40'43"E 770.64' TO A POINT ON THE EAST LINE OF THE SE 1/4 SE 1/4 OF SAID SECTION 33, WHICH BEARS N00°01'23"E 139.45' FROM THE SOUTHEAST CORNER OF SAID SECTION 33, THENCE S68°40'43"E 7.66'; THENCE S78°07'49"E 41.98'; THENCE N89°58'44"E 996.76'; THENCE S85°20'49"E 812.24'; THENCE S73°20'46"E 45.02'; THENCE S68°56'40"E 152.37' TO A POINT ON THE SOUTH LINE OF THE SE 1/4 SW 1/4 OF SECTION 34, T148N, R94W, 5TH P.M., WHICH BEARS N89°50'50"W 602.45' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 34, THENCE S68°56'40"E 210.93'; THENCE S52°03'24"E 40.03'; THENCE S46°04'22"E 392.32'; THENCE S35°33'55"E 157.91' TO A POINT ON THE EAST LINE OF THE NE 1/4 SW 1/4 OF SECTION 3, T147N, R94W, 5TH P.M., WHICH BEARS S00°02'30"E 499.41' FROM THE NORTH 1/4 CORNER OF SAID SECTION 3, THENCE S33°33'55"E 253.66'; THENCE S45°57'44"E 41.71'; THENCE S57°57'41"E 40.06'; THENCE S70°08'15"E 40.04'; THENCE S81°35'22"E 39.90'; THENCE N65°57'51"E 40.03'; THENCE N73°57'55"E 39.97'; THENCE N62°00'53"E 752.94'; THENCE N64°33'22"E 442.64' TO A POINT IN THE NE 1/4 NE 1/4 OF SAID SECTION 3, WHICH BEARS S79°48'45"W 1224.39' FROM THE NORTHEAST CORNER OF SAID SECTION 3. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 6.510 ACRES MORE OR LESS.

LINE		LINE TABLE	
LINE	DIRECTION	LENGTH	
L1	S98°58'53"E	62.44'	
L2	N00°00'36"E	210.50'	
L3	N09°16'46"E	40.21'	
L4	N21°19'15"E	39.93'	
L5	S68°40'43"E	770.64'	
L6	S68°40'43"E	7.68'	
L7	S78°07'49"E	41.98'	
L8	N89°59'44"E	896.24'	
L9	S85°20'49"E	812.24'	
L10	S73°20'46"E	45.02'	
L11	S68°56'40"E	152.37'	
L12	S68°56'40"E	210.93'	
L13	S52°03'24"E	40.03'	
L14	S46°04'22"E	392.32'	
L15	S35°33'55"E	157.91'	
L16	S35°33'55"E	253.66'	
L17	S45°57'44"E	41.71'	
L18	S57°57'41"E	40.06'	
L19	S70°08'15"E	40.04'	
L20	S81°55'22"E	39.90'	
L21	N85°57'51"E	40.03'	
L22	N73°57'55"E	39.97'	
L23	N62°00'53"E	752.94'	
L24	N64°33'22"E	442.64'	

CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



REGISTERED LAND SURVEYOR
REGISTRATION NO. 4654
STATE OF NORTH DAKOTA

UTAH ENGINEERING & LAND SURVEYING
85 SOUTH - 200 EAST • (435) 789-1017
VERNAL, UTAH - 84078

SCALE	$1'' = 500'$	DATE	11-01-11
PARTY	A.K. S.B.	REFERENCES	G.L.O. PLAT
WEATHER	COLD	FILE	5124

SE 1/4

ARROW PIPELINE, LLC
FORT BERTHOLD #148-94-33D-28-4H & #148-94-33D-28-5H
PIPELINE RIGHT-OF-WAY
SECTIONS 33 & 34, T148N, R94W, &
SECTION 3, T147N, R94W, 5th P.M.

TOTAL PIPELINE RIGHT-OF-WAY ON TRIBAL LANDS

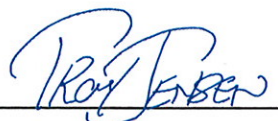
TOTAL LENGTH OF RIGHT-OF-WAY IS 5671.91' OR 1.074 MILES. WIDTH OF RIGHT-OF-WAY IS 50' (25' PERPENDICULAR ON EACH SIDE OF THE CENTERLINE). CONTAINS 6.510 ACRES MORE OR LESS.

ENGINEER'S AFFIDAVIT

STATE OF MONTANA }
COUNTY OF RICHLAND } SS

TROY JENSEN, BEING FIRST DULY SWORN DEPOSES AND STATES THAT HE IS THE REGISTERED LAND SURVEYOR, FOR ARROW PIPELINE, LLC, THAT THESE SURVEYS WERE MADE BY HIM (OR UNDER HIS SUPERVISION): THAT HE HAS EXAMINED THE FIELD NOTES OF THE SURVEYS OF THE PIPELINE RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP, THAT THIS MAP WAS PREPARED UNDER HIS DIRECTION FROM SAID FIELD NOTES; AND THAT SAID RIGHT-OF-WAY, 1.074 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN ON THIS MAP IS ACCURATELY REPRESENTED.




REGISTERED LAND SURVEYOR
REGISTRATION NO. 4654
STATE OF NORTH DAKOTA

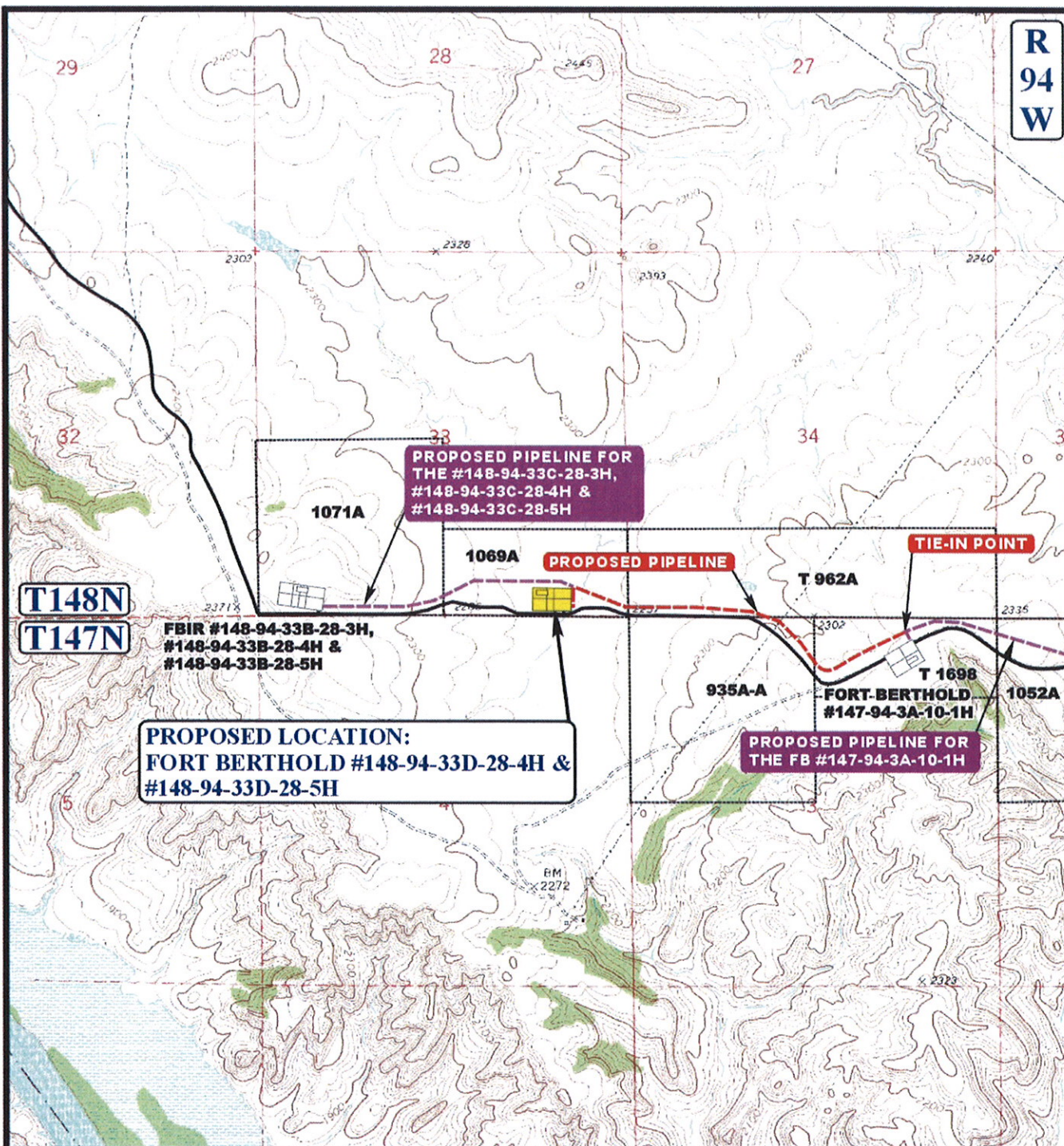
APPLICANT'S CERTIFICATE

I, JOHN M. DOLAN, DO HEREBY CERTIFY THAT I AM THE V.P. OF ENGINEERING FOR ARROW PIPELINE, LLC, HEREINAFTER DESIGNATED THE APPLICANT; THAT TROY JENSEN WHO SUBSCRIBED TO THE FOREGOING AFFIDAVIT, IS EMPLOYED BY THE APPLICANT AS A LAND SURVEYOR AND THAT HE WAS DIRECTED BY THE APPLICANT TO SURVEY THE LOCATION OF THIS PIPELINE RIGHT-OF-WAY, 1.074 MILES IN LENGTH BEGINNING AT STA. 0+00 AND ENDING AT STA. 56+71.91, THAT SAID PIPELINE RIGHT-OF-WAY IS ACCURATELY REPRESENTED ON THIS MAP; THAT SUCH SURVEY AS REPRESENTED ON THIS MAP HAS BEEN ADOPTED BY THE APPLICANT AS THE DEFINITE LOCATION OF THE RIGHT-OF-WAY THEREBY SHOWN; AND THAT THE MAP HAS BEEN PREPARED TO BE FILED WITH THE SECRETARY OF THE INTERIOR OR HIS DULY AUTHORIZED REPRESENTATIVE AS PART OF THE APPLICATION FOR SAID RIGHT-OF-WAY TO BE GRANTED THE APPLICANT, ITS SUCCESSORS AND ASSIGNS, WITH THE RIGHT TO CONSTRUCT, MAINTAIN, AND REPAIR IMPROVEMENTS, THEREON AND THEREOVER, FOR SUCH PURPOSES, AND WITH THE FURTHER RIGHT IN THE APPLICANT, ITS SUCCESSORS AND ASSIGNS TO TRANSFER THIS RIGHT-OF-WAY BY ASSIGNMENT, GRANT, OR OTHERWISE.

APPLICANT

V.P. OF ENGINEERING
TITLE

**R
94
W**



APPROXIMATE TOTAL PIPELINE DISTANCE = 5,672' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- - - - - PROPOSED PIPELINE
- - - - - PROPOSED PIPELINE (SERVICING OTHER WELLS)

N

ARROW PIPELINE, LLC

**FORT BERTHOLD #148-94-33D-28-4H,
& #148-94-33D-28-5H
SECTIONS 33 & 34, T148N, R94W, 5th P.M.
SECTION 3, T147N, R94W, 5th P.M.**



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

**TOPOGRAPHIC
MAP**

10 28 11
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: B.D.H. REVISED: 00-00-00

**D
TOPO**

Notice of Availability and Appeal Rights

Arrow Pipeline, L.L.C.: Addendum to Environmental Assessment to Authorize Land Use for Pipelines Connecting the Fort Berthold #148-94-33D-28-4H, -5H Wells to the Approved Arrow Fort Berthold #147-94-3A-10-1H Pipeline System

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to an Addendum to Authorize Land Use for Pipelines Connecting the Fort Berthold #148-94-33D-28-4H, -5H Wells to the Approved Arrow Fort Berthold #147-94-3A-10-1H Pipeline System on the Fort Berthold Reservation as shown on the attached map. Construction by Arrow Pipeline, L.L.C. is expected to begin in 2012.

An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Earl Silk, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant Impact (FONSI).

The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA's decision to proceed with administrative actions *can* be appealed until April 25, 2012, by contacting:

**United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Indian Appeals
801 N. Quincy Street, Suite 300, Arlington, Va 22203.**

Procedural details are available from the BIA Fort Berthold Agency at 701-627-4707.

Project locations.

